



NY-POWER-AUTHORITY (NYPA) President Says New Technology Will Transform Electricity Industry

ALBANY, N.Y.--Oct. 6, 1999--An "explosion of new technology" brought about by competition in the utility industry promises to affect all aspects of how electricity is produced, delivered and consumed, New York Power Authority (NYPA) President and Chief Operating Officer Eugene W. Zeltmann told an industry conference here Wednesday.

The new technology will be reflected in part through improvements in traditional central power stations and the transmission grid, Zeltmann told a conference on Combined Heat and Power (CHP).

"We're seeing that firsthand at the New York Power Authority, where we're installing a first-of-its-kind transmission control device at our Marcy Substation near Utica," he said. "This convertible static compensator will use high-speed solid state electronics to control electricity flow and permit more efficient use of existing transmission lines. It could revolutionize delivery of electricity in the competitive age."

There will also be "another technological path of enormous potential for our industry, marked by various forms of localized, **distributed generation** such as fuel cells, **rooftop solar photovoltaic systems** and microturbines," Zeltmann said. "In fact, for the first time in decades the most economical way to add electric generating capacity could be to build small, efficient plants located near the end user."

Zeltmann said combined heat and power, or cogeneration, projects--which use heat left over from the generation process to supply more energy--could be a prominent form of distributed generation because they will contribute to the efficient use of fossil fuels while helping to clean the air.

"The New York Power Authority is doing its best to help make CHP a reality as part of its overall efforts in distributed generation," he said.

One example is NYPA's 200-kilowatt (kw) fuel cell at a Westchester County wastewater treatment plant in Yonkers--the first fuel cell in the Western Hemisphere to run on a gas produced in the sewage treatment process.

By processing the gas, the fuel cell yields hydrogen, which combines with oxygen in a chemical reaction that produces electricity and hot water.

"The electricity meets some of the treatment plant's needs--and the hot water helps warm the bacteria that break down the waste in the treatment process. It's a great example of CHP in action," Zeltmann said.

"Our success in this pioneering project has led to installation of several similar units elsewhere in the country, and we're planning soon to introduce the same technology at a wastewater treatment plant in New York City," he said.

The Power Authority has installed a 200-kw fuel cell powered by natural gas at a police precinct station in New York City's Central Park, and has a similar project at the North Central Bronx Hospital. Zeltmann noted that **NYPA's other efforts in distributed generation include 16 rooftop solar photovoltaic installations around the state with a total capacity of 565 kw.**

The U.S. Department of Energy, the New York State Energy Research and Development Authority and the state Public Service Commission co-sponsored the conference at the Desmond Hotel.

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